UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,778	03/08/2001	Francois Rey	11343.030001	6588

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EXAMINER
RAMAN, USHA

ART UNIT	PAPER NUMBER
2424	

NOTIFICATION DATE	DELIVERY MODE
01/21/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	09/786,778	REY ET AL.
	Examiner	Art Unit	
	USHA RAMAN	2424	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 October 2008</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>48-64</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>48-64</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed October 8th, 2008 have been fully considered but they are not persuasive.

    Applicant argues (see Remarks, page 6) that the DVB fails to teach services and application carried by services. Examiner respectfully disagrees. The DVB discloses that the services are a sequence of programs (analogous to channels as stated by applicant), wherein programs form the data carried by the services and thus, meet the claimed "application data". See DVB SI Specification, pages 5-6. Applicant further argues (see Remarks page 6) that the BAT and ADT are, "two distinct data entities and cannot be equated with one another", arguing that "BAT provides a list of services as available in each bouquet". Examiner respectfully disagrees. The BAT includes a service list descriptor (see DVB Guidelines page 19), wherein the service list descriptor further identifies services by a service_id (same as program_number in most cases) and a service_type (see DVB SI specification page 54). As such the service list descriptor describes the programs offered by each service of a bouquet. Furthermore, applicant's broadly recited fail to convey such a distinction.

    For these reasons the rejection is maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102

that form the basis for the rejections under this section made in this Office

action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in
> public use or on sale in this country, more than one year prior to the date of application for patent in
> the United States.

3. Claims 48-49, 51-57, 59-62 are rejected under 35 U.S.C. 102(b) as being

anticipated by DVB Document A038, "Specification for Service Information

(SI) in Digital Video Broadcasting (DVB) Systems" published in March 1998.

With regards to claims 48 and 56, the DVB Specification discloses a

method of transmission of application data in a plurality of services (see fig. 1)

in a digital transport stream. In particular a service is identified as a sequence

of programs, wherein the programs are a concatenation of one or more

events. Accordingly each service (reading on claimed "service") carries at

least one program (reading on claimed "application data"). See DVB SI

Specification, pages 5-6. A BAT further provides information regarding a

collection of services transmitted on a bouquet. See pages 5 and 8. The

DVB Specification further incorporates in by reference ETR 211 "Digital Video

Broadcasting (DVB): Guidelines on implementation and usage of Service

Information (SI)". The DVB Guidelines discloses that the BAT includes a

service list descriptor (see page 19, 4.2.2.2.1), wherein the service list

descriptor further identifies services by a service_id (same as

program_number in most cases) and a service_type (see DVB SI

specification page 54). Accordingly the BAT comprises information regarding

at least one program (identified by service_id) carried by each of the plurality

of services within the transport stream.

With further regards to claim 56, the DVB SI specification further

discloses that the data is transmitted over a physical medium from an emitting

point. See page 5. Accordingly the emitting point reads on the claimed

"means for transmitting a transport stream".

With regards to claims 49, and 57, the application data table (BAT) is

transported in a transport packet having a predetermined packet ID value

(0x0011) associated with the presence of an application data table within the

packet. See page 11.

With regards to claims 51, and 59, the DVB SI specification further

discloses a program map table (PMT) gives access to all applications carried

by this service, the program map table itself comprising information

(program_number, see page 54) regarding at least one application carried by

this service. See page 8.

With regards to claims 52, and 60, the DVB Guideline notes that there

maybe one or more bouquets (see page 12), wherein the BAT describes the

services provided for bouquet identified by bouquet_id (see DVB SI

Specification: page 16). Accordingly in the scenario where there are more

than one bouquets, each bouquet identified by a bouquet_id has a BAT. This

reads on the claimed, "plurality of application data tables, each application

data table containing information regarding applications contained within a bouquet of services".

With regards to claims 53, and 61, the DVB SI specification discloses that the BAT may be a table comprising a plurality of sub tables (see DVB SI specification pages 6, 15). The BAT therefore is associated with one of table and a section having one of a characteristic table ID and a characteristic table ID extension value (see DVB SI specification pages 6 and 10).

With regards to claim 54, the method further comprises receiving the application data in a digital television system (see DVB SI specification page 4).

With regards to claim 55, and, 62, the method further comprises wherein the digital transport stream conforms to the MPEG standard (see DVB SI specification page 6).

4. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over DVB Document A038, "Specification for Service Information (SI) in Digital Video Broadcasting (DVB) Systems" published in March 1998 in view of Metz et al. (US Pat. 5,978,855).

With regards to claim 63, the DVB Specification discloses a method of transmission of application data in a plurality of services (see fig. 1) in a digital transport stream. In particular a service is identified as a sequence of programs, wherein the programs are a concatenation of one or more events. Accordingly each service (reading on claimed "service") carries at least one

program (reading on claimed "application data"). See DVB SI Specification,
pages 5-6. A BAT further provides information regarding a collection of
services transmitted on a bouquet. See pages 5 and 8. The DVB
Specification further incorporates in by reference ETR 211 "Digital Video
Broadcasting (DVB): Guidelines on implementation and usage of Service
Information (SI)". The DVB Guidelines discloses that the BAT includes a
service list descriptor (see page 19, 4.2.2.2.1), wherein the service list
descriptor further identifies services by a service_id (same as
program_number in most cases) and a service_type (see DVB SI
specification page 54). Accordingly the BAT comprises information regarding
at least one program (identified by service_id) carried by each of the plurality
of services within the transport stream. It is noted that when changing
channels, data identified by program_number that is equivalent to the
service_id is downloaded from the PMT.

The system is silent on the step of deleting and maintaining the
applications in dependence on the information contained within the
application data.

In an analogous art, Metz discloses a method of downloading
applications from a broadcast channel (see column 5, lines 32-36), wherein
all the data pertaining to the application are downloaded and stored in
memory (column 22, lines 20-30). Accordingly downloading such an
application necessitates tuning to the channel for downloading the data
packets associated with the application. Furthermore, Metz discloses an

example of such an application maybe in the form of a non-resident

application that communicates with the resident software to provide additional

functions such as emulating channel changing functions of a remote control

through a keyboard (see column 22, lines 40-49). Furthermore, Metz

discloses that non-resident applications are maintained in memory until the

resident software makes a call to terminate the non-resident application and

release its resources (see column 41, lines 58-64). Accordingly Metz

discloses a scenario where a non-resident application is downloaded in a

channel, stored in memory, that enables user to change channel and is

"maintained" in the memory until the resident application terminates the non-

resident application, upon which it is deleted from the memory. It can

therefore be seen that, certain applications, based on their application types

are desirable to be maintained in memory even after channel change.

Accordingly it would have been obvious to one of ordinary skill in

the art to modify the system in view of Metz by using information in the

application data table determining for maintaining the application based on

the application type, or adding or deleting applications when changing

channels so that necessary applications can be retained.

5. Claims 50 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable

over DVB Document A038, "Specification for Service Information (SI) in

Digital Video Broadcasting (DVB) Systems" published in March 1998 in view

of Akins (US Pat. 6,526,508).

With regards to claims 50, and 58, the DVB does not disclose on the step of electronically signing the application data table so as to permit a decoder to verify an application data table as originating from a known operator.

Akins teaches the need for additional security measurements in downloading service related information to ensure that a received data is received from legitimate source. See column 5, lines 41-45 and lines 56-59. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method in view of Akins' teachings to provide authentication means with the service information tables so that the receiver can authenticate the data prior to downloading it.

6. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over DVB Document A038, "Specification for Service Information (SI) in Digital Video Broadcasting (DVB) Systems" published in March 1998 in view of Metz et al. (US Pat. 5,978,855) and further in view of Akins (US Pat. 6,526,508).

With regards to claim 64, the modified system does the DVB does not disclose on the step of electronically signing the application data table so as to permit a decoder to verify an application data table as originating from a known operator.

Akins teaches the need for additional security measurements in downloading service related information to ensure that a received data is received from legitimate source. See column 5, lines 41-45 and lines 56-59.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method in view of Akins' teachings to provide authentication means with the service information tables so that the receiver can authenticate the data prior to downloading it.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USHA RAMAN whose telephone number is (571)272-7380. The examiner can normally be reached on Tue-Fri: 8am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit 2424

/Usha Raman/